**City of San Antonio's Planning Department
GIS Division Newsletter**

Newsletter – General Information: The GIS Division will publish this GIS Newsletter once a month. The intent is to share our knowledge of GIS, to communicate what projects the GIS Division is involved in at the present time, to keep all GIS users up-to-date with the latest GIS technology, to communicate what information we have about the City of San Antonio's GIS Enterprise and to promote the use of ARCGIS as an informational tool that will make all of our jobs easier. Let's start with a basic review of "What is the GIS Plan".

What is the GIS Plan? *By Woody Woodruff*

Mission Statement: The Planning Department / GIS Division (GIS Division) will promote the use of Geographic Information Systems (GIS) and its technologies. The GIS Division will develop, maintain, and operate a Geographic Information System that provides the Mayor, the City Manager, the Planning Department, other Departments and the Public with spatial information to assist in the decision making process. The following illustrates the duties of the GIS Division:

- Provide creation, distribution and maintenance of spatial data.
- Promote collaboration and sharing of GIS data and resources.
- Produce maps, graphs, tables, images and applications using GIS data to support operational functions.
- Provide support to the GIS users, internal and external.
- Provide essential link between Planners and the City's GIS enterprise data.
- Provide analysis and distribution of City statistical data, to include: census, development, and building.

The Role of GIS Technology

The Planning Department is increasingly challenged to maintain or reduce costs while maintaining the effectiveness and efficiency of overall services and operations. GIS technology will be an important part of meeting this responsibility. Today, GIS must be an integral part of a successful Planning Department. Speed, efficiency, and accuracy in information exchange have become competitive tools to satisfy customer demands, improve productivity and enhance innovation and creativity. The Internet is another driving force behind new GIS technology. The GIS Division has implemented this technology into its work programs such as the Zoning Internet Mapping Web Application (http://maps.sanantonio.gov/default_zoning.asp).

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Accomplishments

Planning-GIS A

- Created the most widely accessed Web Page in the City of San Antonio (Zoning Web Application http://maps.sanantonio.gov/default_zoning.asp).
- Created GIS Customer Point of Service to enhance the GIS products, service and delivery to the Public.
- Converted the Planning's Department CADD & desktop GIS files to GIS Enterprise format (ArcGis),
- Created and implemented UDC Zoning Code crossover for GIS Zoning data.
- Assumed lead role in the City Counsel redistricting mapping process.
- Responsible for City Precinct Map reconciliation project.
- Trained largest group of city drafting technicians and brought them up to GIS technology skill levels.
- First and largest Department from the City of San Antonio to implement ARC8 in a production GIS environment.
- Established electronic document editing of zoning documents to enhance the Zoning Process.
- Major data contributions to the CRAG, Southside Initiative, C2 Vacant Land Study, Tree Ordinance, Edwards Aquifer, PGA, Prop 3, Market Square, and Riverwalk projects.
- Assimilated and trained the Board of Adjustment (BOA) graphic staff to produce GIS quality map products for BOA process.
- Implemented first departmental ArcGIS training program for non-GIS staff.
- Implemented Online GIS Work Order Data Base.
- Created Historic Site GIS Database.
- Designed and assisted in Disability Access Project (Sidewalk Condition Inventory).

The Benefits & Challenges

The Benefits include:
- User-friendly tools for the employees to access data that will increase productivity.
- Access the Internet for electronic maps and data exchange.
- Develop systems that can be easily and quickly changed.
- Ease of sharing data from divisions/departments/agencies with other divisions/departments/agencies, with the Council and with the public.

The Challenges of Planning GIS:
- Shorter time to implement changes.
- Speed in which technology is changing.
- Training of Staff to keep Pace with technology and demand.
- Complete the Triangle of GIS: Data - Hardware & Software - Skilled GIS Professionals.

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Activities of the GIS Division

Planning/GIS uses powerful computer technology that displays and processes information geographically. GIS technology is used to produce the maps found in conference rooms and offices throughout the City. Planning/GIS assists the City staff in using GIS technology accurately and efficiently to analyze and communicate about issues of concern.   Planning/GIS focuses on five areas:

- Products
  Produce maps, graphs, tables, images and applications using GIS data to support planning and operational functions.
- Support
  Support the use of GIS throughout the City and develop access to GIS through software and web based GIS products.
- Data
  Create and process GIS data for use by City of San Antonio users.
- Data Sharing
  The GIS Division promotes GIS data sharing among government organizations in the region.
- GIS Staff
  Provide staff support for the Planning initiative. The types of projects that most often utilize the GIS Division's assistance include comprehensive planning, zoning, tourism planning, historic preservation planning and neighborhood planning.

Specific Projects accomplished by the GIS Division include: Parcel landuse mapping, Zoning mapping, Board of Adjustment mapping, Floodplain assessment mapping, Land use mapping-future and current, Historical mapping, Resource mapping, Various business and environmental modeling, Transportation analyses, Comprehensive planning mapping, Community Facilities mapping, Social, Economic, and Population mapping, Redistricting of Electoral boundaries, political boundary mapping, and use of Global Positioning System Data.

The functional areas of The GIS Division include:

- Planning Department GIS System Administration and Maintenance.
- The performance of normal GIS system administration and maintenance, such as database organization, metadata compilation, hardware and software maintenance, training and related activities. These functions are performed on an on going basis and are necessary for the functionality of the system within the Planning Department.
- The design and maintenance of the Zoning web page Internet Map Server.
- GIS Coordinator for Planning Department.
- GIS Representative to City GIS-Enterprise Organization.

Article End

2000 DETAILED CENSUS FILES RELEASED September 19, 2002

The Census Bureau has released the Summary File (SF 3) for the state of Texas. There is the common misconception that all information related to the Census is readily available after April 1, 2000. The Census Bureau releases the data in stages, with the most important being the "Redistricting Data" which is the first release--one year after the Census. The remaining process depends on the available resources. In comparison to ten years ago, the Census is approximately six months behind schedule. The last major release was back in June, over two years since the Census, and this was only a 3 page demographic profile of cities and counties including San Antonio and Bexar County. This info (SF 3) is the first release of the information collected on a sample basis and provides the first detailed look at our overall population in over 10 years. The (SF 3) data will be provided down to smaller geographic areas for the tabulations. The following samplings of tables are those of most concern:
- ❖ School Enrollment
- ❖ Educational Attainment
- ❖ Disability Status
- ❖ Employment status, Occupation, & Industry
- ❖ Income & poverty Status
- ❖ Housing-Year Structure Built & Moved into Unit
- ❖ Number of Units in Structure
- ❖ Vehicles Available & Commuting to Work
- ❖ Value & Rent of Owner and Renter Occupied Units
- ❖ Etc.—over 100 other tables

This information will be released for all of Texas down to tract and block group levels and will provide an outlook on how different geographic areas of the City and County are fairing. The demographic data that will be released on the Internet for everyone's use. The GIS Division has downloaded and is translating these files for use by staff and the general public. The files will be aggregated and sorted by a common geographic area and this will result in a vast amount of information that will be readily available. In addition, this will increase staff as well as community access to the 2000 Census figures. In the future, additional data or interpretations will be available in the form of maps or trend line comparisons to the 1990 data. The following trend profile is such a comparison of how the City has changed since 1990 and a map of the percentage concentration of Hispanics with the 2000 Census.

Limited Annexation Plan Launched with GIS Support

The South Side ULI Briefing Book was completed Thursday September. 19, 2002. The GIS Division's team lead by Doug Overton accomplished a map series that was reviewed and well received by Jelynne Burley, Assistant City Manager. The GIS Division teamed with the Comprehensive Division, representatives from the Mayor's Office and City Manager's Office to put this document out in record short time.

The County Council Districts are Approved by the Department of Justice.

The Department of Justice Approved the City Council Districts as submitted. Long hours and hard work from all the GIS Division staff members went into this accomplishment.

Precincts Status Report   (September 20, 2002)

The Planning Department/GIS Division has reconciled the Bexar County 2002 Voters Precincts to the City of San Antonio's street base from information and data received from Bexar County Elections. The end result is a value added City of San Antonio Precinct Map and database that has and will clarify the precinct locations with regard to San Antonio GIS data sets. Since the original precinct data and map base (Bexar County Elections, their Consultant and Texas State Legislative Council has a map tolerance of + or - 130 feet) differs geographically from the City of San Antonio's base map (City of San Antonio's digital Ortho image which has a map tolerance of + or - 5 feet), a map reconciliation procedure is necessary. Every effort is being made to ensure the proper location of each and every precinct within Bexar County (600+). This process involves a cooperative effort between the Bexar County Elections Staff and the City of San Antonio's Planning Department/GIS Staff. Multiple source documents (Bexar Elections - Texas State Legislative Council) were used to ensure the proper location of the precinct boundaries within the City's Precinct Map. Regular weekly meetings were scheduled to accomplish this task. This effort was very time consuming for both agencies and had to be accomplished while each agency maintained a normal production schedule that did not include precinct mapping.

Some Precinct Map edit changes were submitted by Bexar County before July and required submission to the Bexar County Commission. These were incorporated into the City's Precinct Map. Additional minor edits to the City Precinct Maps have been for the most part Right-of-Way or alignment adjustments. These mapping procedures should not inhibit use of the City Precinct Maps Revised 8/28/02 or later. The latest revision will soon be available on the COSA Map Website. The Planning Department has worked very hard to ensure that the City of San Antonio Precinct Maps are the most detailed and accurate maps available. These maps contain the "Best Available Data" and, therefore, should be used with confidence by the City of San Antonio Departments.

David Rodriguez lead this project with Gus Gutierrez providing his Senior GIS talents to make it work. All the GIS Technicians in the GIS Division have taken on some of the tasks in this project. Good work everyone.

DATES AND EVENTS

ESRI User Conference Recap 11/12/02 - 11/12/02

Hey ArcGIS users out there. No travel budget this year. Then you had better not miss this seminar. It is the Grand-daddy (except the Annual Conference in San Diego) of ArcGIS Seminars. It is right here in San Antonio. Be there or be square! Seriously! Make this seminar. Do not pass this up. It only comes once a year. If it is like last years event, there will be training, demos, venders, and ESRI staff to ask technical questions. Write them down, bring your data. This is a terrific opportunity. Advance registration is required but at no cost.   Don't miss it.

Schedule Time
Registration   8:30 AM-9:00 AM
Seminar   9:00 AM-4:00 PM
City of San Antonio Municipal Auditorium, 100 Auditorium Circle